DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 69.28

WELDING INSPECTION REPORT

Resident Engineer: Pursell, Gary **Report No:** WIR-015501 Address: 333 Burma Road **Date Inspected:** 05-Jul-2010

City: Oakland, CA 94607

OSM Arrival Time: 700 **Project Name:** SAS Superstructure **OSM Departure Time:** 1900 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

CWI Name: CWI Present: Yes Li Yang No **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A N/A N/A **Electrode to specification:** Yes No Weld Procedures Followed: Yes No N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A N/A Yes N/A **Approved Drawings:** Yes No **Approved WPS:** No **Delayed / Cancelled:** Yes No N/A

34-0006 **Bridge No: Component: OBG Segment**

Summary of Items Observed:

On this date Caltrans OSM Quality Assurance (QA) Inspector Mr.M.Manikandan was present during the time noted above for observations relative to the work being performed.

OBG # TRIAL ASSEMBLY YARD

This QA inspector along with QA inspector Mr.Manjunath S Math performed dimensional joint survey inspection on the WT stiffener to confirm vertical and horizontal offset on the following segment. The measurements are recorded in the designated sheet and forwarded to team leader for review and disposition.

Segment 9AE to Segment 9BE

OBG # TRIAL ASSEMBLY YARD (7BW)

This QA inspector witnessed the final bolt tension verification on the Catwalk support of segment 7BW. The torque wrench S/N was 090001. The QA inspector witnessed 10% of the bolts on a random basis and found the tensioning of the bolts appeared to be in general compliance. The panel point and bolt size designations were as follows:

PP 50 to PP 51:

M16 X 45 – DHGM 160010 – 200 NM

M16 X 50 – DHGM 160011 – 200 NM

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OBG # TRIAL ASSEMBLY YARD (7DW)

This QA inspector witnessed the final bolt tension verification on the Catwalk support of segment 7DW. The torque wrench S/N was 090001. The QA inspector witnessed 10% of the bolts on a random basis and found the tensioning of the bolts appeared to be in general compliance. The panel point and bolt size designations were as follows:

PP 56 to PP 57:

M16 X 45 - DHGM 160010 - 200 NM

M16 X 50 - DHGM 160011 - 200 NM

For additional information please reference the pictures below:

This QA Inspector randomly observed the following work in progress:

OBG # TRIAL ASSEMBLY YARD (9AW)

The QA inspector observed the welding operation per the SMAW process on weld joint no. 006 in the (4G) overhead position on corner assembly piece mark no. CA055. The location was the hold back area of longitudinal weld joining the Edge to Deck panel of segment 9AW. The welder ID was 037996. The ZPMC CWI was identified as Li Yang. The welding variables recorded by QC appeared to comply with the WPS-B-P-2214-Tc-U4b-FCM-1.

OBG # TRIAL ASSEMBLY YARD (9BW)

The QA inspector observed the welding operation per the SMAW process on weld joint no. 002 in the (4G) overhead position on corner assembly piece mark no. CA059. The location was the hold back area of longitudinal weld joining the Edge to Deck panel of segment 9BW. The welder ID was 037996. The ZPMC CWI was identified as Li Yang. The welding variables recorded by QC appeared to comply with the WPS-B-P-2214-Tc-U4b-FCM-1.

OBG # TRIAL ASSEMBLY YARD (9CE)

The QA inspector observed the buttering operation per the FCAW process on longitudinal diaphragm, LD12B in the (1G) flat position located on E3 work point of segment 9CE. The welder ID was 062092. The ZPMC CWI was identified as Li Yang. The welding was performed against welding repair report B-WR13818. The welding variables recorded by QC appeared to comply with the WPS-B-T-2231T-1.

OBG # TRIAL ASSEMBLY YARD (9CE)

The QA inspector observed the welding operation per the FCAW process on weld joint no. 007 and 008 in the (2G) horizontal position on longitudinal diaphragm piece mark no. SEG054B. The location was the hold back area of longitudinal diaphragm, LD11B located on E4 work point of segment 9CE. The welder ID was 220069. The ZPMC CWI was identified as Li Yang. The welding variables recorded by QC appeared to comply with the

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WPS-B-T-2132.

OBG # TRIAL ASSEMBLY YARD (9BE-9CE)

The QA inspector observed the welding operation per the SMAW process on weld joint no. 009 in the (3G) vertical position on side panel piece mark no. OBE9B. The location was the transverse splice weld joining segment 9BE and 9CE. The welder ID was 054467. The ZPMC CWI was identified as Li Yang. The welding was performed against welding repair report B-WR13917. The welding variables recorded by QC appeared to comply with the WPS-345-SMAW-3G (3F)-FCM-Repair-1.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.



Summary of Conversations:

No relevant conversations were reported on this date.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang 15000422372, who represents the Office of Structural Materials for your project.

Inspected By:	Manikandan, Murugan	Quality Assurance Inspector
Reviewed By:	Peterson,Art	QA Reviewer